

**MINUTES**  
**TOWNSHIP OF WEST ORANGE**  
**ZONING BOARD OF ADJUSTMENT**  
**MEETING**  
**April 19, 2012**

The West Orange Zoning Board of Adjustment held a regular meeting on April 19, 2012 at 8:00 PM at 66 Main Street, West Orange, N.J. in Council Chambers.

Chairman Neuer called the meeting to order at approximately 8:00 P.M. It was announced that notification of this meeting was given to the Township Clerk, the West Orange Chronicle, and posted on the Township Bulletin Board on November 29, 2011 in accordance with the "Open Public Meetings Act."

Chairman Neuer asked everyone to stand for the Pledge of Allegiance

Alice Beirne, Esq., Board Attorney, read the Opening Statement.

**PRESENT:** Bruce Buechler, Gregory Bullock, Deborah Gabry, Philip Neuer, Bart Quentzel, Eric Sacks, William Steinhart, Mark Sussman

**ABSENT:** Alice Weiss (excused absence)

**ALSO PRESENT:** Susan Borg, A.I.C.P., P.P., A.I.A.  
Eric Keller, Consulting Engineer  
Board Attorney: Alice Beirne, Esq.  
Board Secretary, Rose DeSena  
Harvey Grossman, Public Advocate

**ANNOUNCEMENTS**

**Future Meetings:** May 17, 2012 (Regular Meeting) – 8:00 PM  
June 14, 2012 (Regular Meeting) – 8:00 PM  
July 19, 2012 (Regular Meeting) – 8:00 PM  
August 16, 2012 (Regular Meeting) – 8:00 PM

Chairman Neuer stated that the Seton Hall Prep application will be carried over to the Zoning Board meeting on May 17, 2012 and no further notice will be given by the applicant or the Board.

Mr. Buechler stated, for the record, that he will not be at the May 17<sup>th</sup> meeting.

Joseph Vena, Esq. approached the podium and requested that the interpretation regarding 56 Undercliff Terrace South be carried over to the May 17, 2012 Zoning Board meeting and be placed on the agenda before the Seton Hall application.

Chairman Neuer stated that he has informed Mr. Vena that additional information is needed and must be submitted before the next meeting.

### MINUTES

**Adopt Minutes:** March 15, 2012 meeting

Chairman Neuer asked if there were any other comments regarding the minutes. Seeing none the Chairman asked for a motion to adopt. Vice Chair Gabry made the motion to adopt and Mr. Buechler seconded.

All were in favor.

### SWEARING IN

Township Professional, Planning Director Susan Borg and Consulting Engineer, Eric Keller were sworn under oath.

### RESOLUTIONS

- 1. ZB-12-02/Auburn Data Systems, LLC Application Denied on 3/15/12**  
Block: 84.01; Lot: 22; Zone: B-2  
10 Marcella Avenue  
Seeking "D" variance & "C" variance to install five (5) antennas on an existing tower.

Chairman Neuer stated that Ms. Beirne, the Board attorney, submitted a draft resolution for this applicant and that he had made some revisions and gave them to Ms. Beirne. He also stated that Ms. Borg had some revisions for this resolution. Ms. Beirne read what the Chairman wanted revised in the resolution.

Mr. Buechler questioned a statement included in the resolution and there was a brief discussion regarding this. Ms. Beirne read from the resolution, what was in question, regarding the applicant wanting to come back to modify the application. She said that it was a statement of fact of the law and it is a correct statement. Ms. Borg stated that the resolution can only include what is discussed at the meeting and that was not discussed. Ms. Beirne agreed that it was not discussed at the meeting. Mr. Buechler said that it should not be in the resolution and that the Board can discuss it at the meeting tonight. Chairman Neuer instructed Ms. Beirne to remove it from the resolution because it was not discussed.

Mr. Keller stated that, on page 6 of the resolution, the correct report was the Board Engineer's report and not the Township's Engineer's report.

Chairman Neuer asked for a motion to adopt this resolution as amended. Vice Chair Gabry made a motion to adopt and Mr. Bullock seconded.

Vote was as follows:

Buechler:	Abstained	Steinhart:	Yes
Bullock:	Yes	Sussman:	Yes
Gabry:	Yes	Weiss:	-
Quentzel:	Abstained	Chairman Neuer:	Yes
Sacks:	-		

Mr. Bullock questioned meeting materials being sent electronically. Mr. Buechler commented on getting the Auburn Data Systems resolution at the last minute. Chairman Neuer said to let the record reflect that the Board members want all meeting materials distributed, the latest, the Friday before a meeting. He also instructed the Board Secretary to bring hard copies of any meeting materials that were submitted at the last minute, to the meeting, for every Board member.

**APPLICATION(S)**

- 1. ZB-11-23/World Class Wireless, LLC** **Carried from 3/15/12**  
Block: 84.01; Lot: 22.01; Zone: B-2  
12 Marcella Avenue  
Seeking three (3)"D" variances for conditional use, more than one principal use and height to install two (2) wireless dish antennas on an existing tower.

**EXHIBITS:**

- A-1 - Sheet Z2 Site Plan and general notes
- A-2 - Sheet Z3 Elevation view and equipment layout
- A-3 - Yuling Chang's report dated 4-5-12

**DISCUSSION:**

Eric Goldberg, attorney for the applicant, approached the podium.

Chairman Neuer noted for the record that, even though there was a court stenographer at the meeting, the only official transcript for this meeting, as with all of our meetings, is Ms. Dillon's transcript. He asked Mr. Goldberg to continue.

Mr. Goldberg began by detailing the application stating that this application is similar to the one discussed earlier this evening. He stated that the applicant is proposing one 6' and one 2 1/2' antenna on an existing 260' tower. Mr. Goldberg stated that they are commercial antennas used to transmit wireless data and detailed who will be testifying.

Chairman Neuer asked Mr. Goldberg if he received a copy of Ms. Borg's report and he replied yes.

Mr. Goldberg read the new Federal Legislation regarding antennas being placed on towers. He said that whenever a tower is going to be modified in a non-significant manner, the Boards must

approve these applications. Chairman Neuer stated that there is an open question as to whether this Board has to approve this application as submitted or if the Board may impose conditions of approval.

Mr. Buechler asked what the statute was and Mr. Goldberg said that it was Federal legislation, section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012. Mr. Goldberg also noted the recent legislation by the State of New Jersey regarding telecommunications permitted use.

There was discussion about the new Federal and State legislation regarding cell towers and what the substantial changes are.

Mr. Goldberg gave a copy of the Federal statute to Chairman Neuer. The Chairman stated that there are no definitions in what he gave him and it is not a copy of the entire statute. Chairman Neuer told Mr. Goldberg that if he is going to argue this that he will need more information. He also said that the physical dimensions are not clear. Chairman Neuer stated that he is concerned with the weight of the antennas and the physical integrity of the tower.

Mr. Buechler questioned Ms. Borg regarding 12 Marcella Avenue asking if the tower obtained approvals for construction from the Township. Ms. Borg stated that she didn't know when the tower was built.

Mr. Goldberg then called Damian Ameen as a witness for the Applicant. Mr. Ameen approached the podium and was sworn under oath. Mr. Ameen stated that he owns a communications company, detailed his educational background and stated that he has been in the telecommunication business since 1982 designing mobile communication systems for many companies. He said that he is an expert in radio frequency engineering. Chairman Neuer stated that this profession does not require a license and also stated, for the record, that Mr. Ameen did not submit a report to the Board. He accepted Mr. Ameen as an expert in radio frequency engineering.

Mr. Ameen described how this network will work and said that it is designed to connect data centers faster. He went on to describe the difference between radio waves and fiber optic. Mr. Ameen stated that this network will connect from the west to the Newark area. Chairman Neuer asked if this network is FCC licensed and Mr. Ameen replied yes.

Mr. Goldberg asked Mr. Ameen why they chose this facility. Mr. Ameen stated that it is in line from Randolph, New Jersey, where another one of their antennas is located, to Newark New Jersey. He said that this location creates the shortest distance between them. Mr. Ameen also stated that this site was chosen because the microwave cannot go through trees; it has to be above them.

Mr. Goldberg asked Mr. Ameen what would happen if they could not use this location. Mr. Ameen said that they would have to redesign it or take another route.

Mr. Goldberg questioned Mr. Ameen about the height they are placing the antennas on the tower. Mr. Ameen stated that they are going to place them at the minimum height because the shorter you can keep the cables the better off it is.

Mr. Goldberg questioned Mr. Ameen about safety of the magnetic frequency. Mr. Ameen explained that the health and safety standards and the EMF levels are low.

Mr. Goldberg asked Mr. Ameen why these specific antennas are chosen. Mr. Ameen stated it is based on the frequency and site. He said that these antennas do not interfere with television reception or any other antennas and are licensed for their own use.

Mr. Goldberg asked if any lighting is to be installed and Mr. Ameen replied no; that the lighting is already in place.

Mr. Bullock asked Mr. Ameen why he chose not to submit a report to this Board and Mr. Ameen stated that there was not a report requirement. Mr. Ameen stated that he can send the Board anything they need. He said that he can provide the calculations of the Fresnel zone. Mr. Bullock asked what the Fresnel zone was and Mr. Ameen said that it's when you transmit along the main beam. Mr. Sussman stated that he has seen Fresnel used with lenses also.

Mr. Sussman asked Mr. Ameen where the signal is coming from. Mr. Ameen stated that the originating location is in Chicago and terminates in downtown Newark.

Mr. Buechler asked Mr. Ameen if there would be any interference with telephone service and Mr. Ameen replied no.

Mr. Buechler stated that there are three other cell towers near this site and Mr. Ameen stated that there are five towers. Mr. Buechler asked how many of these towers have microwave dishes on them today and Mr. Ameen said three. Mr. Buechler asked Mr. Ameen if one microwave dish interferes with another if they are on the same frequency. Mr. Ameen replied yes but stated that these dishes do not have the same frequency at the same location and they are specifically designed that way. Mr. Buechler asked if they can confirm that at the Marcella Avenue site and Mr. Ameen replied yes. Mr. Ameen stated that they did a PCN and the frequency is clear. Mr. Buechler asked Mr. Ameen what he is basing his testimony on. Mr. Ameen stated that Dr. Foster did the report and he reviewed it. Mr. Buechler asked Mr. Ameen if he relied solely on Dr. Foster's report. Mr. Ameen stated that they did an independent one but Dr. Foster's report carries more weight. Chairman Neuer told Mr. Ameen that the Board is here trying to make a record and Dr. Foster is not here to answer.

Chairman Neuer asked Mr. Ameen if the design that they are presenting is the only possible design to complete this chain. Mr. Ameen replied not but it is the least expensive design.

Chairman Neuer asked Mr. Ameen what other sites they looked at besides this one. Mr. Ameen stated that they looked at other West Orange sites and they could not get a clear path on any other site.

Chairman Neuer asked what the cost is to install these dishes on the towers. Mr. Ameen stated that it cost anywhere from \$5,000 to \$35,000. Mr. Ameen said that it is all about the delay in the system and not the cost.

Chairman Neuer asked Mr. Ameen how many dishes are installed between Chicago and Newark and Mr. Ameen said he did not know.

Chairman Neuer asked how much the dish weighs and Mr. Ameen stated that the 6' dish is approximately 300 lbs. and with the mounting hardware they are approximately 600 lbs. Chairman Neuer asked what the dishes are made of and Mr. Ameen stated that they are made of steel. Mr. Ameen said that they have to be metallic because any other material will not reflect the radio waves.

Chairman Neuer asked Mr. Ameen to clarify the analysis of the trees being in the way. Mr. Ameen stated that they do not want trees to grow in the path and this is why they chose the height they did.

Chairman Neuer asked Mr. Ameen if they were to add another point and find another location to erect another dish, could they make the 6' dish smaller. Mr. Ameen replied yes.

Mr. Sussman asked if the dish could be fiberglass and Mr. Ameen stated that he is not aware of a non metallic dish anywhere.

Chairman Neuer asked how they install the dishes and Mr. Ameen stated that another witness will testify to that.

Ms. Borg asked what the difference was between the 6' dish and the 2' dish. Mr. Ameen stated that the 6' dish takes the frequency from Randolph and the 2' dish transmits it to Newark. He said that they need a bigger dish to receive the frequency. Ms. Borg asked if they could use two smaller dishes instead of the 6' dish. Mr. Ameen said no that it does not work that way. He said that with a smaller dish the signal may not make it all the way from Randolph. Mr. Ameen said that they are using the smaller dish to transmit to Newark because the distance is shorter. He said that the reliability decreases if you make smaller dishes and using a 6' dish is not uncommon.

Ms. Borg asked Mr. Ameen what the color of the tower was. Mr. Ameen stated that it is a mix of colors and has orange and white paint on it. Ms. Borg wanted to know if they will ever use satellite dishes. Mr. Ameen said no because they do not have the band width.

Mr. Grossman asked Mr. Ameen if they looked at existing towers and Mr. Ameen replied yes. Mr. Grossman asked if they could construct their own tower and Mr. Ameen replied yes. Mr. Grossman asked if there was any location where they can construct their own tower. Mr. Ameen said that they do not look for sites to build their own towers. He said that the only time they would build a tower is if they could not find a site with a tower already on it. Mr. Ameen stated that there are 22 miles between Randolph and West Orange and there was no other location between here and there that would work. Chairman Neuer asked if there were other options if the Board denies this application and Mr. Ameen said yes but only as a last resort.

Chairman Neuer asked Mr. Ameen if there is a plan B in place and Mr. Ameen said yes. Mr. Grossman asked Mr. Ameen what their plan B is and Mr. Ameen said that it is beyond the scope of this and that would be up to his client to say what it is.

Mr. Grossman wanted to know where the other sites were that Mr. Ameen said they looked at in this area. Mr. Ameen said they looked at the Valley Road, Stagg Field, Department of Public Works, Ridgeway Avenue and Pleasant Valley Way sites. Mr. Grossman asked Mr. Ameen if they looked outside of West Orange. Mr. Ameen said that the path would not work outside of West Orange.

Chairman Neuer asked what the other format was other than microwave. Mr. Ameen said that they would look at fiber optic providers but it is very costly.

Chairman Neuer asked if any members of the public had any questions for this witness.

Shay Deshpande approached the podium and stated that he lived at 376 DiGaetano Terrace. He stated that his question was about health and safety and asked Mr. Ameen if there were any risks to anyone in the Eagle Ridge Condos. Mr. Ameen replied no; none at all. Mr. Deshpande asked Mr. Ameen if he had any data to confirm this. Mr. Ameen said yes and told Mr. Deshpande that there is more microwave frequency in his house. He said that there are many studies out there confirming this.

Henry Zackin approached the podium and stated that he lived at 372 DiGaetano Terrace. Dr. Zackin asked why they did not choose the Stagg Field location because it is not a congested area like the Eagle Ridge area. Mr. Ameen stated that the path was not good from Stagg Field.

Yanmeng Gan approached the podium and stated that she lived at 140 Leonardo Drive. She asked Mr. Ameen what the difference was between the 6' and the 2' antenna. Mr. Ameen stated that there is a frequency difference. He said the larger dish is used to focus the energy to make the path work. Mr. Ameen said that they are transmitting at very low levels that are less than one watt. Ms. Gan asked Mr. Ameen if they did a combined exposure study and he replied yes. Ms. Gan said that there are other dishes on this site and did his calculations include the other dishes. Mr. Ameen stated that he did calculate their levels. Ms. Gan asked what direction the dishes are going to face and Mr. Ameen said they will be facing west and east. Ms. Gan asked Mr. Ameen if the dishes throw off any heat and he replied no.

Mary Ellen Morrow approached the podium and stated that she lived at 178 Dezenzo Lane. Ms. Morrow stated that she saw a sign at the base of the tower that said "danger" and asked Mr. Ameen what the danger was. Mr. Ameen said that there is a radio transmitter on top of the tower and if someone climbed up the tower and touched it that they would get hurt. He said that there are no transmitters at a low level that could cause danger.

Chairman Neuer recessed the meeting at 9:37 pm.

The meeting resumed at 9:45 pm.

Joseph Vena, Esq., attorney for the applicant DEKAB, approached the podium and requested to be carried over to the next meeting. Chairman Neuer announced that this application will be carried over to the May 17, 2012 meeting and no further notice will be necessary.

Jim Pryor, Esq., attorney for the applicant Communication Infrastructure Corp., approached the podium and requested to be carried over to the next meeting unless they get to this application. Chairman Neuer announced that this application will be carried over to the May 17, 2012 meeting and no further notice will be necessary.

Joseph Frega approached the podium and was sworn under oath. Mr. Frega detailed his educational background and work experience stating that he is a civil and structural engineer licensed in the State of New Jersey and is presently employed by Dewberry Engineers. Chairman Neuer accepted his qualifications as an expert in civil and structural engineering.

Mr. Frega presented boards and said that they are drawings that were submitted with the original application package. Chairman Neuer asked to have sheet Z2 of the site plan and general notes entered as Exhibit A-1 and sheet Z3 of the elevation views entered as Exhibit A-2.

Mr. Frega began by describing what is presently on the site, what is presently on the tower and where the equipment cabinet is placed on the site. He continued by describing what the applicant is proposing, detailing the ingress and egress to the site and specified that the color of the equipment cabinet is an off white or cream color. Mr. Frega explained how the antennas are mounted, stating that they are bolted to a length of pipe that is mounted directly to the structure.

Mr. Goldberg asked Mr. Frega how much the antennas weigh. Mr. Frega said that the 2' model is approximately 43 lbs. and the 6' antenna is approximately 320 lbs.

Mr. Frega described their general maintenance and stated that they are not proposing a generator, parking or lighting.

Mr. Goldberg asked Mr. Frega about the structure. Mr. Frega stated that he visited the site and reviewed the structural analysis report submitted by Yuling Chang and has no concerns about the structure. Chairman Neuer asked to have Yuling Chang's report marked as Exhibit A-3 for identification, not yet in evidence.

Mr. Buechler stated that he did not receive this report in his meeting material package and Ms. Borg stated that this report was not submitted with the application. Mr. Buechler expressed a concern about meeting materials not being received. Ms. Borg stated that it was determined some time ago that some materials that come into the office after the hard copy packages are delivered are to be emailed to the Board members. She said that the purpose of this was for cutting down on expenses. Chairman Neuer explained to the members of the public how the meeting materials are submitted to the Board and said that some were missing. He said that, for the record, the Board wants all meeting materials in the application package submitted to them in hard copy from now on.

Mr. Keller asked Mr. Frega about the generator that he saw on the site. Mr. Frega stated that there is an existing generator on site and that they are not installing one. Mr. Buechler asked if they are proposing to hook into that generator. Mr. Frega said no; he said that there are back up batteries in the equipment and they may use them.

Mr. Buechler asked Mr. Frega if they needed fire suppression equipment or any special equipment. Mr. Ameen approached and answered and stated that no fire suppression equipment is needed and that the electronics are designed not to catch fire. He said that the equipment cabinet is sealed and if a fire did start that it would be contained for four hours.

Mr. Grossman asked how many antennas are there now and if he inspected the tower. Mr. Ameen answered and said that there are at least thirty (30) antennas on the tower but not all of them are dish antenna. He said that there are all different types of antennas there now. Chairman Neuer asked Mr. Ameen if all thirty (30) antennas get wired into the same little equipment shelter and Mr. Ameen replied no. He stated that there are many equipment shelters for the different types of antennas.

Chairman Neuer asked if any members of the public had any questions for Mr. Frega.

Yameng Gan approached the podium stating that she lived at 140 Leonardo Drive and asked what the total weight of the dishes were. Mr. Frega said that the 6' dish weighs 600 lbs. and the smaller one is approximately 150 lbs. Ms. Gan asked what was the total weight the tower could handle and Mr. Fega said that Mr. Chang, the structural engineer, will testify that.

Jim Pryor, Esq., attorney for the applicant Communication Infrastructure Corp., approached the podium and asked to have this application carried over to the next meeting. Chairman Neuer stated, for the record, that this application will be carried over to the May 17, 2012 meeting and that no further notice will be required.

There was some discussion regarding the total weight of the dishes. Mr. Buechler stated that he disagreed with Mr. Ameens testimony regarding the weight of the dishes. Mr. Goldberg asked Mr. Ameen if it was fair to say the large dish weighs 475 lbs. and the smaller dish weighs 43 lbs and 100 lbs. total with the hardware for a total of 600 lbs. Mr. Ameen replied yes.

Yuling Chang approached the podium and was sworn under oath. Mr. Chang detailed his educational background and professional experience. He stated that he is here to testify as a structural engineer. Chairman Neuer accepted his credentials as an expert in structural engineering.

Mr. Chang stated that he submitted two reports; the first report was F code and the second report G code. Mr. Goldberg asked Mr. Chang to describe his findings. Mr. Chang stated that his report instructed the owner to modify the tower because it did not meet the code requirements. He said that there are 41 antennas including the two new antennas being proposed.

Mr. Goldberg said that Mr. Chang's report stated that the tower will hold the weight if they make the modifications. Mr. Buechler asked Mr. Chang if the tower met the G requirements and Mr.

Chang said no because the codes have changed. Mr. Buechler asked Mr. Chang if the tower proposes any danger today. Mr. Chang said yes that ice and wind at 180 mph proposed a danger today.

Chairman Neuer asked who has been in touch with the owner of the tower and Mr. Goldberg stated that he has. Chairman Neuer asked if the owner of the tower has agreed to make the improvements and Mr. Goldberg said yes. Mr. Goldberg stated that if the application is approved to make it a condition that the modifications must be made. Chairman Neuer asked how long it would take to make the upgrade and Mr. Chang said at least one month.

Chairman Neuer told Mr. Goldberg that he may not finish tonight and before the next meeting the board wants something from the owner stating that they will comply and the work will be done within 90 days. Ms. Borg stated that the owner must upgrade now. Mr. Buechler said that is not relevant to this application. Mr. Goldberg stated that, if the application is approved, these modifications will be made. Chairman Neuer asked Mr. Goldberg what if the application is not approved; he said that Mr. Chang just testified that the tower is not up to code. Mr. Chang said that if no modifications are made to the structure then they do not have to comply with the code G requirements. Mr. Goldberg asked Mr. Chang if the tower passed structurally and Mr. Chang replied yes. Chairman Neuer asked for a brief description of the modifications. Mr. Quentzel asked who inspects the tower after the modifications are made. Mr. Chang said that he will look at it after they modify but he cannot climb the tower. He said that he will sign off on the drawing. Mr. Ameen stated that the applicant will be paying for the modifications. Mr. Buechler asked Mr. Keller to check Code G to verify that this is all correct.

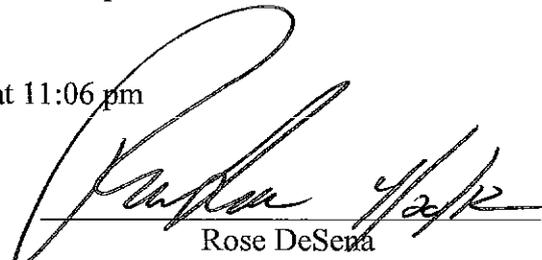
Chairman Neuer asked the Board members if they want to have the owner of the tower subpoenaed to appear before them or if a notarized letter will suffice. The Board members all agreed that just a notarized letter, stating that they will make the modifications, will suffice.

Mr. Goldberg asked if the structural changes will need permits from the Town because every town is different. Ms. Borg stated that they will probably need permits.

Mr. Goldberg stated that he will be in touch with Ms. Borg and make a minor amendment to the plan that show where the legs of the tower are on the site plan. Mr. Keller stated that he will need to see the legs in elevation form.

The meeting was adjourned by Chairman Neuer at 11:06 pm

April 19, 2012



Rose DeSena  
Zoning Board Secretary